

Amendments to the Claims:

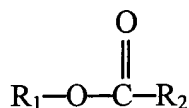
This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1-21. (Canceled).

22. (Currently amended) A method for control of unwanted nematodes, the method comprising administering to mammals, plants, seeds or soil a nematicidal composition comprising:

(a) an effective amount of a compound having the formula



wherein:

R₁ = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy;

R₂ = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons counting from the carbonyl carbon and either: (i) a triple bond

between the 12th and 13th carbons counting from the carbonyl carbon or (ii) either a single or double bond between the 12th and 13th carbons counting from the carbonyl carbon and at least one substituant at one or both of the 12th and 13th carbons counting from the carbonyl carbon, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy; and

(b) an aqueous surfactant; ~~to control nematodes~~

whereby unwanted nematodes are controlled.

23. (Previously presented) The method of claim 22 wherein R₁ = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) an unsubstituted C1-C2 carbon chain.

24. (Previously presented) The method of claim 22 wherein R_2 = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons counting from the carbonyl carbon and either: (i) a triple bond between the 12th and 13th carbons counting from the carbonyl carbon or (ii) either a single or double bond between the 12th and 13th carbons and at least one substituent at one or both of the 12th and 13th carbons counting from the carbonyl carbon, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) an unsubstituted C1-C2 carbon chain.

25-28. (Canceled).

29. (Previously presented) The method of claim 22 wherein R_1 is a C1-C2 substituted or unsubstituted carbon chain.

30. (Previously presented) The method of claim 22 wherein R_2 is substituted only at one or both of 12th and 13th carbons.

31. (Previously presented) The method of claim 22 wherein R_2 is substituted only at the 12th carbon.

32-33. (Canceled).

34. (Previously presented) The method of claim 22 wherein within R₂ the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) epoxy, and
- iii) a C1 alkyl.

35. (Currently amended) A method for control of unwanted nematodes, the method comprising administering to mammals, plants, seeds or soil a nematicidal composition comprising an effective amount of:

- (a) a fatty acid methyl ester selected from the group consisting of: ricinoleic acid methyl ester, crepenynic acid methyl ester, and vernolic acid methyl ester; and
- (b) an aqueous surfactant; ~~to control nematodes~~
whereby unwanted nematodes are controlled.

36. (Previously presented) The method of claim 22 or claim 35 wherein the aqueous surfactant is selected from the group consisting of: ethyl lactate, polyoxyethylene sorbitan 20 monolaureate, polyoxyethylene 9 nonylphenyl ether.

37. (Previously presented) The method of claim 22 or claim 35 wherein the composition further comprises:

- (c) a permeation enhancer.

38. (Previously presented) The method of claim 37 wherein the permeation enhancer is a cyclodextrin.

39. (Previously presented) The method of claim 22 or 35 wherein the composition further comprises:

(c) a co-solvent.

40. (Previously presented) The method of claim 39 wherein the co-solvent is isopropanol.

41. (Previously presented) The method of claim 22 or claim 35 further comprising administering a nematicide selected from the group consisting of: avermectins, ivermectin, and milbemycin.

42. (Previously presented) The method of claim 22 wherein the nematode infects plants and the nematicidal composition is applied to the soil or to plants.

43. (Previously presented) The method of claim 42 wherein the nematicidal composition is applied to soil before planting.

44. (Previously presented) The method according to claim 42 where the nematicidal composition is applied to soil after planting.

45. (Previously presented) The method of claim 42 wherein the nematicidal composition is applied to soil using a drip system.

46. (Previously presented) The method of claim 42 wherein the nematicidal composition is applied to soil using a drench system.

47. (Previously presented) The method of claim 42 wherein the nematicidal composition is applied to plant roots.

48. (Previously presented) The method of claim 22 wherein the nematicidal composition is applied to seeds.

49. (Previously presented) The method of claim 22 wherein the nematode infects a mammal.

50. (Previously presented) The method of claim 22 wherein the nematicidal composition is administered to non-human mammal.

51. (Previously presented) The method of claim 22 wherein the nematicidal composition is administered to a human.

52. (Previously presented) The method of claim 50 wherein the nematicidal composition is formulated as a drench to be administered to a non-human animal.

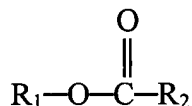
53. (Previously presented) The method of claim 49 wherein the nematicidal composition is formulated as an orally administered drug.

54. (Previously presented) The method of claim 49 wherein the nematicidal composition is formulated as an injectable drug.

55-66. (Canceled).

67. (Previously presented) A nematicidal composition comprising:

(a) an effective amount of a compound having the formula



wherein:

R_1 = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy; and

R_2 = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons counting from the carbonyl carbon and either: (i) a triple bond between the 12th and 13th carbons counting from the carbonyl carbon or (ii) either a single or double bond between the 12th and 13th carbons counting from the carbonyl carbon and at least one substituent at one or both of the 12th and 13th carbons counting from the carbonyl carbon, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and

viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy;

(b) an aqueous surfactant; and

(c) a nematicide selected from the group consisting of: avermectins, ivermectin, and milbemycin.

68. (Previously presented) The composition of claim 67 wherein the aqueous surfactant is selected from the group consisting of: ethyl lactate, polyoxyethylene 20 sorbitan monolaureate, polyoxyethylene 9 nonylphenyl ether.

69. (Previously presented) The composition of claim 67 further comprising a permeation enhancer.

70. (Previously presented) The composition of claim 67 further comprising a co-solvent.

71. (Previously presented) The nematicidal composition of claim 70 wherein the co-solvent is isopropanol.

72. (Previously presented) The nematicidal composition of claim 67 wherein R_1 = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

i) hydroxy,

ii) halogen,

iii) amino,

iv) cyano,

v) cyclopropane,

vi) cyclopropene,

- vii) epoxy, and
- viii) an C1-C2 carbon chain.

73. (Previously presented) The nematicidal composition of claim 67 wherein R_2 = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons counting from the carbonyl carbon and either: (i) a triple bond between the 12th and 13th carbons counting from the carbonyl carbon or (ii) either a single or double bond between the 12th and 13th carbons counting from the carbonyl carbon and at least one substituent at one or both of the 12th and 13th carbons counting from the carbonyl carbon, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) an unsubstituted C1-C2 carbon chain.

74. (Previously presented) The nematicidal composition of claim 67 wherein R_1 is a C1-C2 substituted or unsubstituted carbon chain.

75. (Previously presented) The nematicidal composition of claim 67 wherein R_2 is substituted only at one or both of 12th and 13th carbons counting from the carbonyl carbon.

76. (Previously presented) The nematicidal composition of claim 75 wherein R_2 is substituted only at the 12th carbon counting from the carbonyl carbon.

77. (Previously presented) The composition of claim 75 wherein within R₂ the substituents are selected from the group consisting of:

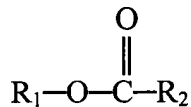
- i) hydroxy,
- ii) epoxy, and
- iii) a C1 alkyl.

78. (Previously presented) The nematicidal composition of any of claims 72-77 wherein the aqueous surfactant is selected from the group consisting of: ethyl lactate, polyoxyethylene 20 sorbitan monolaureate, polyoxyethylene 9 nonylphenyl ether.

79. (Previously presented) The nematicidal composition of any of claims 72-77 further comprising a co-solvent.

80. (Previously presented) A nematicidal composition consisting essentially of:

- (a) an effective amount of a compound having the formula



wherein:

R₁ = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and

viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy; and

R_2 = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons counting from the carbonyl carbon and either: (i) a triple bond between the 12th and 13th carbons counting from the carbonyl carbon or (ii) either a single or double bond between the 12th and 13th carbons counting from the carbonyl carbon and at least one substituent at one or both of the 12th and 13th carbons counting from the carbonyl carbon, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy; and

(b) an aqueous surfactant selected from the group consisting of: ethyl lactate, polyoxyethylene 20 sorbitan monolaureate, polyoxyethylene 9 nonylphenyl ether.

81. (Previously presented) The nematicidal composition of claim 80 wherein R_1 = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,

- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) an unsubstituted C1-C2 carbon chain.

82. (Previously presented) The nematicidal composition of claim 80 wherein R_2 = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons counting from the carbonyl carbon and either: (i) a triple bond between the 12th and 13th carbons counting from the carbonyl carbon or (ii) either a single or double bond between the 12th and 13th carbons counting from the carbonyl carbon and at least one substituent at one or both of the 12th and 13th carbons counting from the carbonyl carbon, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) an unsubstituted C1-C2 carbon chain.

83. (Previously presented) The composition of claim 80 wherein R_1 is a C1-C2 substituted or unsubstituted carbon chain.

84. (Previously presented) The composition of claim 80 wherein R_2 is substituted only at one or both of 12th and 13th carbons counting from the carbonyl carbon.

85. (Previously presented) The composition of claim 80 wherein R₂ is substituted only at the 12th carbon counting from the carbonyl carbon.

86. (Previously presented) The composition of claim 85 wherein within R₂ the substituents are selected from the group consisting of:

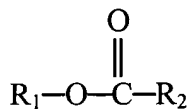
- i) hydroxy,
- ii) epoxy, and
- iii) a C1 alkyl.

87. (Canceled).

88. (Previously presented) A nematicidal feed for a non-human mammal comprising:

(a) a feed selected from the group consisting of: soy, wheat, corn, sorghum, millet, alfalfa, clover, and rye;

(b) an effective amount of a nematicidal compound having the formula



wherein:

R₁ = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and

viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy;

and

R_2 = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons and either: (i) a triple bond between the 12th and 13th carbons or (ii) either a single or double bond between the 12th and 13th carbons and at least one substituent at one or both of the 12th and 13th carbons, wherein the substituents are selected from the group consisting of:

i) hydroxy,

ii) halogen,

iii) amino,

iv) cyano,

v) cyclopropane,

vi) cyclopropene,

vii) epoxy, and

viii) a substituted or unsubstituted C1-C2 carbon chain, wherein the substituents on the C1-C2 carbon chain are selected from the group consisting of hydroxy, halogen, amino, cyano, and epoxy; and

(c) an aqueous surfactant.

89. (Previously presented) The nematicidal feed of claim 88 wherein R_1 = a C1-C5 substituted or unsubstituted carbon chain, wherein the substituents are selected from the group consisting of:

i) hydroxy,

ii) halogen,

iii) amino,

iv) cyano,

- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) an unsubstituted C1-C2 carbon chain.

90. (Previously presented) The nematicidal feed of claim 88 wherein R_2 = a C15-C19 substituted or unsubstituted carbon chain having a *cis* double bond between the 9th and 10th carbons counting from the carbonyl carbon and either: (i) a triple bond between the 12th and 13th carbons counting from the carbonyl carbon or (ii) either a single or double bond between the 12th and 13th carbons counting from the carbonyl carbon and at least one substituent at one or both of the 12th and 13th carbons counting from the carbonyl carbon, wherein the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) halogen,
- iii) amino,
- iv) cyano,
- v) cyclopropane,
- vi) cyclopropene,
- vii) epoxy, and
- viii) an unsubstituted C1-C2 carbon chain.

91. (Previously presented) The nematicidal feed of claim 88 wherein R_1 is a C1-C2 substituted or unsubstituted carbon chain.

92. (Previously presented) The nematicidal feed of claim 88 wherein R_2 is substituted only at one or both of 12th and 13th carbons counting from the carbonyl carbon.

93. (Previously presented) The nematicidal feed of claim 92 wherein R₂ is substituted only at the 12th carbon counting from the carbonyl carbon.

94. (Previously presented) The nematicidal feed of claim 92 wherein within R₂ the substituents are selected from the group consisting of:

- i) hydroxy,
- ii) epoxy, and
- iii) a C1 alkyl.

95-96. (Canceled).

97. (Previously presented) A nematicidal feed for a non-human mammal comprising:

- (a) a feed selected from the group consisting of: soy, wheat, corn, sorghum, millet, alfalfa, clover, and rye;
- (b) a fatty acid methyl ester selected from the group consisting of: ricinoleic acid methyl ester, crepenynic acid methyl ester, and vernolic acid methyl ester; and
- (c) an aqueous surfactant.